1. (CURRENTLY AMENDED) A method for the preparation of a phenolic / polyurea co-polymer elastomeric coating system comprising the reaction of two components where:

(a) one component is an isocyanate quasi-prepolymer of an isocyanate and an active hydrogen containing material; and

(b) the other component is a blend ~~of~~ including:

an amine-terminated polyether polyol ~~resins~~ having a molecular weight of at least about 1500;

amine-terminated chain extenders, and

phenolic resins;

wherein curing of the co-polymer coating system is initiated upon mixing of the (a) component and the (b) component, said components thereby gelling in less than about 13 seconds.

2. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the isocyanate quasi-prepolymer is prepared from an active hydrogen containing polyether polyol and/or a phenolic resin.

3. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the isocyanate quasi-prepolymer is based on an isocyanate selected from the group of isocyanates consisting of aromatic isocyanates.

4. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the isocyanate quasi-prepolymer is based on an isocyanate selected from the group of isocyanates consisting of aliphatic isocyanates.

5. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the amine-terminated resin is an amine-terminated polyoxyalkylene polyol or blend of amine-terminated polyoxyalkylene polyols.

6. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the amine-terminated chain extender is selected from the group consisting of an aliphatic, cycloaliphatic or aromatic diamine chain extenders.

7. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the amine-terminated chain extender is a blend of aliphatic, cycloaliphatic and/or aromatic diamine chain extenders.

8. (ORIGINAL) The phenolic / polyurea co-polymer elastomer system of Claim 1 wherein the isocyanate quasi-prepolymer further contains an epoxy resin.

9. (CURRENTLY AMENDED) A method for the preparation of a phenolic/polyurea co-polymer elastomeric coating system comprising the reaction of two components wherein:

(a)the first component comprises an isocyanate; and

(b) the second component comprises a blend of:

active amine hydrogen containing materials, and

phenolic resins;

wherein at least about 70 percent of the active hydrogen groups in the reaction mixture are in the form of amine groups; and

wherein curing of the co-polymer coating system is initiated upon mixing of the (a) component and the (b) component.

10. (ORIGINAL) The method of claim 9 wherein said isocyanate comprises an isocyanate quasi-prepolymer of an isocyanate, and an active hydrogen containing material.

11. (ORIGINAL) The method of claim 10 wherein said quasi-prepolymer is prepared from an active hydrogen containing material selected from the group consisting of polyols, amine-terminated alkylenes, phenolic resins, and blends thereof.

12. (ORIGINAL) The method of claim 11 wherein said quasi-prepolymer is prepared from an active hydrogen containing material selected from

the group consisting of polyether polyols, polyester polyols, polyesters of hydroxyl-terminated rubbers, and blends thereof, having an equivalent weight of at least about 500.

13. (ORIGINAL) The method of claim 12 wherein said quasi-prepolymer is prepared from a polyether polyol based on a trihydric initiator with a molecular weight of at least about 4000.

14. (ORIGINAL) The method of claim 9 wherein said phenolic resins have an active hydrogen content equal to or greater than 2.

15. (ORIGINAL) The method of claim 9 wherein at least about 70 percent of the active hydrogen groups in the reaction mixture are in the form of amine groups.

16. (ORIGINAL) The method of claim 10 wherein the isocyanate quasi-prepolymer is based on an isocyanate selected from the group consisting of aromatic isocyanates.

17. (ORIGINAL) The method of claim 16 wherein said isocyanate quasi-prepolymer is based on the group consisting of aromatic polyisocyanates.

18. (ORIGINAL) The method of claim 17 wherein the isocyanate quasi-prepolymer is based on methylene bis(4-phenylisocyanate).

19. (ORIGINAL) The method of claim 10 wherein the isocyanate quasi-prepolymer is based on an isocyanate selected from the group consisting of aliphatic isocyanates.

20. (ORIGINAL) The method of claim 19 wherein the isocyanate quasi-prepolymer is selected from the group consisting of aliphatic diisocyanates.

21. (ORIGINAL) The method of claim 9 wherein the isocyanate index is in the range of about 0.95:1 to about 2.00:1.

22. (ORIGINAL) The method of claim 9 wherein the isocyanate index is in the range of about 1.00:1 to about 1.50:1.

23. (ORIGINAL) The method of claim 9 wherein the first component further comprises an epoxy resin.

24. (ORIGINAL) The method of claim 9 wherein said active amine hydrogen containing materials are selected from the group consisting essentially of amine-terminated alkylenes, simple alkyl amines, amine terminated polyols, and blends thereof.

25. (ORIGINAL) The method of claim 24 wherein said active amine hydrogen containing materials are selected from the group consisting of aminated diols, triols, and blends thereof, having a molecular weight greater than about 1500 and a functionality from about 2 to about 6, and an amine equivalent weight from about 750 to about 4000.

26. (ORIGINAL) The method of claim 24 wherein said active amine hydrogen containing materials are a blend of primary and secondary amine-terminated polyols, having an average molecular weight of at least about 2000 and a functionality of about 2 to about 3, an amine equivalent weight from about 750 to about 4000, and greater than about 90 percent of active hydrogens in the form of amine hydrogens.

27. (ORIGINAL) The method of claim 9 wherein said second component further comprises an amine-terminated chain extender selected from the group consisting of aliphatic, cycloaliphatic, and aromatic diamine chain extenders, and blends thereof.

28. (ORIGINAL) The method of claim 27 wherein said amine terminated chain extenders are selected from the group consisting of 1-methyl-3,5-diethyl-2,4-diaminobenzene, 1-methyl-3,5-diethyl-2,6-diaminobenzene, and blends thereof.

29. (ORIGINAL) The method of claim 28 wherein said amine terminated chain extender is 1-methyl-3,5-diethyl-2,4-diaminobenzene.

30. (PREVIOUSLY AMENDED) The method of claim 27 wherein said amine-terminated chain extenders are selected from the group consisting of amine-terminated polyethers, amine-terminated alkylenes, simple alkyl amines, and blends thereof.

31. (ORIGINAL) The method of claim 30 wherein said amine-terminated chain extenders are amine-terminated polyethers having a molecular weight of less than about 400 and a functionality of from about 2 to about 6.

32. (ORIGINAL) The method of claim 9 wherein said second component further comprises hydroxyl-terminated polyether chain extenders having a functionality of from about 2 to about 6.

33. (ORIGINAL) The method of claim 9 wherein said reaction of two components takes place in the absence of catalyst.

34. (CANCELLED)

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49. (CANCELLED)

50. (ALLOWED) A substrate coated with a two-component phenolic / polyurea co-polymer coating comprising the reaction product of:

(a) a first component that includes an isocyanate; and

(b) a second component that includes a blend of active amine hydrogen containing materials and phenolic resins;

wherein said (a) and said (b) components are mixed just prior to application to the substrate and allowed to cure thereon; and

wherein said active amine hydrogen containing materials are a blend of primary and secondary amine-terminated polyols, having an average molecular

weight of at least about 2000 and a functionality of about 2 to about 3, an amine equivalent weight from about 750 to about 4000, and greater than about 70 percent of active hydrogens in the form of amine hydrogens.

51. (CANCELLED)

52. (CANCELLED)

53. (ALLOWED) The substrate of claim 50 wherein said isocyanate comprises a quasi-prepolymer is prepared from material selected from the group consisting of polyether polyols, polyester polyols, amine-terminated polyethers, and polyesters of hydroxyl-terminated rubbers, phenolic resins, and blends thereof, having an equivalent weight of at least about 500.

54. (ALLOWED) The substrate of claim 53 wherein said quasi-prepolymer is prepared from a polyether polyol based on a trihydric initiator with a molecular weight of at least about 4000.

55. (ALLOWED) The substrate of claim 50 wherein the isocyanate is based on an isocyanate selected from the group consisting of aromatic and aliphatic isocyanates.

56. (ALLOWED) The substrate of claim 50 wherein the isocyanate is based on methylene bis(4-phenylisocyanate).

57. (CANCELLED)

58. (CANCELLED)

59. (CURRENTLY AMENDED) The substrate of claim 50 wherein said ~~amine-terminated polyether resins~~ active amine hydrogen containing materials include greater than about 90 percent of active hydrogens in the form of amine hydrogens.

60. (ALLOWED) The substrate of claim 50 wherein said second component further comprises a chain extender selected from the group consisting of aliphatic diamines, cycloaliphatic diamines, aromatic diamines, amine-terminated alkylenes, polyethers, simple alkyl amines, and blends thereof.

61. (ALLOWED) The substrate of claim 50 wherein said coating is applied using high temperature, high pressure, plural component spray equipment that combines said first component and said second component, wherein:

said first component and said second component are impingement mixed directed in the high-pressure spray equipment, then applied to the desired substrate via said spray equipment.

62. (ALLOWED) The substrate of claim 50 wherein pigment and reinforcing materials are added to said coating.

63. (ALLOWED) A method for the preparation of a phenolic/polyurea co-polymer elastomeric coating system comprising the reaction of two components wherein:

(a) the first component comprises an isocyanate; and

(b) the second component comprises a blend of:

active amine hydrogen containing materials, and phenolic resins;

wherein greater than about 70 percent of the active hydrogen groups in the reaction mixture are in the form of amine hydrogens.

64. (ALLOWED) A method for the preparation of a phenolic/polyurea co-polymer elastomeric coating system comprising the reaction of two components wherein:

(a) the first component comprises an isocyanate; and

(b) the second component comprises a blend of:

active amine hydrogen containing materials, and phenolic resins;

wherein said active amine hydrogen containing materials are a blend of primary and secondary amine-terminated polyols, having an average molecular weight of at least about 2000 and a functionality of about 2 to about 3, an amine equivalent weight from about 750 to about 4000, and greater than about 70 percent of active hydrogens in the form of amine hydrogens.

65. (ALLOWED) A phenolic/polyurea co-polymer composition prepared by a process comprising the steps of:

(a) preparing an isocyanate quasi-prepolymer of an isocyanate and an active hydrogen containing material; and

(b) mixing said isocyanate quasi-prepolymer with a resin blend containing active amine hydrogen containing materials and phenolic resins capable of reacting with said isocyanate groups of the quasi-prepolymer composition;

wherein at least about 70 percent of the active hydrogen groups are in the form of amine groups.

66. (ALLOWED) The composition of claim 65 wherein at least about 80 percent of the active hydrogen groups in the reaction mixture are in the form of amine groups.

67. (ALLOWED) A phenolic/polyurea co-polymer composition prepared by a process comprising the steps of:

(a) preparing an isocyanate quasi-prepolymer of an isocyanate and an active hydrogen containing material; and

(b) mixing said isocyanate quasi-prepolymer with a resin blend containing active amine hydrogen containing materials and phenolic resins capable of reacting with said isocyanate groups of the quasi-prepolymer composition;

wherein said active amine hydrogen containing materials are a blend of primary and secondary amine-terminated polyols, having an average molecular weight of at least about 2000 and a functionality of about 2 to about 3, an amine equivalent weight from

about 750 to about 4000, and greater than about 80 percent of active hydrogens in the form of amine hydrogens.

68. (ALLOWED) A substrate coated with a phenolic/polyurea co-polymer coating comprising the reaction product of:

(a) a first component that includes an isocyanate; and

(b) a second component that includes a blend of active amine hydrogen containing materials and phenolic resins;

wherein said active amine hydrogen containing materials are selected from the group consisting of primary and secondary amine-terminated polyols and blends thereof having a molecular weight greater than about 1500 and a functionality from about 2 to about 6, an amine equivalent weight from about 750 to 4000, and greater than about 70 percent of active hydrogens in the form of amine hydrogens.

69. (NEW) A method for the preparation of a phenolic/polyurea co-polymer elastomeric coating system comprising the reaction of two components wherein:

(a) the first component comprises an isocyanate; and

(b) the second component comprises a blend of:

primary and secondary amine-terminated polyols, and

phenolic resins.

70. (NEW) The method of claim 69 wherein said second component includes primary and secondary amine-terminated polyols having a molecular

weight of at least about 1500, and an amine equivalent weight between about 750 and about 4000.

71. (NEW) A phenolic/polyurea co-polymer elastomer material produced according to the method of claim 69.